

Work Order ID 135440

Wednesday, August 12, 2015 4:28:41 PM

135440

Page 1

Item ID: D412-711-021

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Vertical Reference Door Modification LH

Stop ***NS2***

Start Date: 7/29/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 8/12/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MLS Date: AUG 14 2015 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D412-711	K

JA

100 Document Control 0.00

100

DC

Doc.Control -USB or Paperwork

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefiles and create labels per PPP D412-711-021 CHG002

MLS

1508-20

DAS

02

9-89

AUG 25 2015

120 Pick Kit 0.00

120

Packaging

Packaging

Purchasing

Memo

0.00

① JA

AUG 20 2015



130 QC4- 100% Inspect kits for completeness 0.00

130

QC

Quality Control

Memo

0.00

DAS

02

9-89

AUG 25 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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135440

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Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Vertical Reference Door Modification LH

Stop

NS2

Start Date: 7/29/15

Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/12/15

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

0.00

150

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-711-021

Location:

PPP rev:

27

8-89

AUG 26 2015

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

MLC AUG 25 2015

SH 20150825

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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Picklist Print

Wednesday, August 12, 2015 4:28:39 PM

Page 1

Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 11.04.07 new issue DD verf:EC
14.04.25 ECN14-548 DD verf:JLM

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4324-011		Manufactured	No				Each	2.0000		1			
-----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	--

D4324-011

Armrest Assembly

DAS
02
9-89

Location

Loc Qty

Loc Code

ST459

2

118945

1

123590

1

D412-761-043

Manufactured No

120

Each

0.0000

1

1

D412-761-043

Modified Latch Mechanism, LH

DAS
02
9-89

B131109

**

JA

D412-711-101

Manufactured No

120

Each

3.0000

1

1

D412-711-101

Replacement Vertical Reference Window

DAS
02
9-89

Location

Loc Qty

Loc Code

FG099

2

123691

2

FG100

1

117050

1

D3802-1-120

Manufactured No

120

Each

5.0000

1

1

D3802-1-120

Window Seal - 120"

DAS
9
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST421

5

114395

5

B134091

**

JA

AUG 20 2015

DAS
16
9-89

10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 2

Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

D4165-1

Manufactured No

120 Each

4.0000

1 1

D4165-1

Doubler

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST246

4

115110

4

D4165-3

Manufactured No

120 Each

3.0000

1 1

D4165-3

Inner Door Panel

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

st238

3

116600

2

123588

1

D4165-5

Manufactured No

120 Each

2.0000

1 1

D4165-5

Aft Rib

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST246

2

116601

2

D4165-7

Manufactured No

120 Each

18.0000

1 1

D4165-7

Fwd Rib

**

JA

AUG 20 2015

DAS
02
9-89

Location

Loc Qty

Loc Code

ST246

18

114255

6

116604

12

Wednesday, August 12, 2015 4:28:39 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

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Page 3

Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

D4165-9 Manufactured No

120 Each 10.0000 1 1

D4165-9

Angle

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST259

10

117148

3

119607

7

D4165-11 Manufactured No

120 Each 5.0000 1 1

D4165-11

Door Cover Panel

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST237

1

116924

1

ST258

4

125784

4

D4207-1 Manufactured No

120 Each 3.0000 1 1

D4207-1

Window Retainer

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST237

3

116606

3

D4207-3 Manufactured No

120 Each 4.0000 1 1

D4207-3

Instrument Window

**

JA

AUG 20 2015

DAS
02
9-89

Location

Loc Qty

Loc Code

ST237

4

116607

4

Wednesday, August 12, 2015 4:28:39 PM

Shop Packet Print

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WORK ORDER NON-CONFORMANCE / UPDATE

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Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

D4269-1

Manufactured No

120 Each

4.0000

1 1

D4269-1

Angle

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST097

4

(116838)

1

123643

3

D4269-3

Manufactured No

120 Each

3.0000

1 1

D4269-3

Angle

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST097

3

(116618)

1

127902

2

D4269-5

Manufactured No

120 Each

6.0000

1 1

D4269-5

Angle

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

ST258

6

(134700)

6

D4269-7

Manufactured No

120 Each

9.0000

1 1

D4269-7

Angle

**

JA

AUG 20 2015

DAS
02
9-89

Location

Loc Qty

Loc Code

ST258

9

(132994)

9

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Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 5

Work Order ID: 135440

Parent Item: D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

135440

D412-711-021

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

D4327-1

Manufactured No

120 Each

5.0000

1 1

D4327-1

Angle

**

JA

DAS
02
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST259

5

113726

1

123687

4

D4327-3

Manufactured No

120 Each

5.0000

1 1

D4327-3

Angle

**

JA

DAS
02
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST259

5

117081

4

119557

1

D4385-1

Manufactured No

120 Each

2.0000

2 2

D4385-1

Placard

DAS
02
9-89

**

JA

DAS
06
9-89

Location

Loc Qty

Loc Code

ST103

2

118897

2

AN3-3A

Purchased No

120 Each

396.0000

22 22

AN3-3A

Bolt

**

JA

AUG 20 2015

DAS
02
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST338a

200

m131624

200

ST350

196

m132317

196

22

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Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

AN3-4A

Purchased

No

120

Each

174.0000

20

20

AN3-4A

Bolt

DAS
02
9-89

D
C
9-89

Location

Loc Qty

Loc Code

CA

110

m129682

110

ST350

64

m132317

64

AN3-6A

Purchased

No

120

Each

146.0000

26

26

AN3-6A

Bolt

DAS
02
9-89

Location

Loc Qty

Loc Code

ST338a

100

M131305

100

ST349

46

m132680

46

AN3-12A

Purchased

No

120

Each

55.0000

1

1

AN3-12A

Bolt

DAS
02
9-89

Location

Loc Qty

Loc Code

CA

55

m129683

55

**

JA

**

JA

**

JA

AUG 20 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased No

120 Each 1,516.000 92 92

NAS1149F0332P

Washer

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

GA 222
122063 222
ST260a 1201
m128401 6
m131026 80
m131697 1115
st268 93
123900 7
m130388 86

92

CR3242-4-2

Purchased No

120 Each 108.0000 34 34

CR3242-4-2

RIVET

DAS
02
9-89

**

JA

Location

Loc Qty

Loc Code

ccr003 108
m131340 108

34

MS20426AD3-3

Purchased No

120 Each 3,807.000 135 135

MS20426AD3-3

RIVET

**

JA

AUG 20 2015

Location

Loc Qty

Loc Code

ST313 3807
M131624 3807

135

DAS
02
9-89

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Page 7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Environment ☐	No Re-verification ☐																																																																						
Design ☐	Operator ☐																																																																						
Doc/Data ☐	Offset/Setup ☐																																																																						
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OTHER :																																																																							

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Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-3

Purchased

No

120

Each

3,116.000

140

140

MS20426AD4-3

Rivet

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

GA

1176

113064

176

m125807

1000

ST312

1940

m125807

1940

MS20470AD3-3

Purchased

No

120

Each

6,634.000

25

25

MS20470AD3-3

RIVET, UNIVERSAL HEAD

**

JA

DAS
02
9-89

Location

Loc Qty

Loc Code

GA

989

1065

989

ST311

5645

16941

5645

MS20470AD4-3

Purchased

No

120

Each

1,824.000

90

90

MS20470AD4-3

Rivet - Universal Head

**

JA

AUG 21 2015

DAS
02
9-89

Location

Loc Qty

Loc Code

GA

893

2193

893

ST310

931

2193

931

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

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Page 9

Work Order ID: 135440

135440

Parent Item: D412-711-021

D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased No

120

Each

1,578.000

24

24

MS21042L3

Nut

**

JA

DAS
6
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

270

M131317

270

ST305

915

116549

12

126333

49

M128754

2

M132123

17

M132382

2

M132883

333

M132930

500

24

MS21059L3

Purchased No

120

Each

81.0000

4

4

MS21059L3

Nut Plate

**

JA

AUG 21 2015

DAS
6
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

CA

16

M129682

16

GA

32

113749

1

M132677

31

ST303

33

M131616

33

4

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Shop Packet Print

Page 9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

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Page 10

Work Order ID: 135440

Parent Item: D412-711-021

Parent Item Name: Vertical Reference Door Modification LH

135440

D412-711-021

Start Date: 7/29/15

Required Date: 8/12/15

Start Qty: 1.00

Required Qty: 1.00

MS21069L3

Purchased No

120

Each

58.0000

34

34

MS21069L3

ANCHOR NUT

DAS
02
9-89

Location

Loc Qty

Loc Code

ST301

58

m130799

25

m131618

19

m13206

14

133019 x 19

**

JA 132067

DAS
6
9-89

MS21069L08

Purchased No

120

Each

664.0000

8

8

MS21069L08

ANCHOR NUT

DAS
02
9-89

Location

Loc Qty

Loc Code

ST301

664

23522

664

120

Each

262.0000

3

8

3

**

JA

MS21071L3

Purchased No

120

Each

262.0000

3

3

MS21071L3

ANCHOR NUT

DAS
02
9-89

Location

Loc Qty

Loc Code

ST301

262

114348

8

124291

50

125654

100

m129702

104

**

JA

MS21071L08

Purchased No

120

Each

165.0000

1

1

MS21071L08

ANCHOR NUT

DAS
02
9-89

Location

Loc Qty

Loc Code

ST301

165

02587

65

103447

100

**

JA

AUG 21 2015

DAS
6
9-89

Wednesday, August 12, 2015 4:28:41 PM

Shop Packet Print

Page 10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	PART NUMBER	DESCRIPTION
					22	22	AN3-3A	BOLT
					20	20	AN3-4A	BOLT
					26	26	AN3-6A	BOLT
					1	1	AN3-12A	BOLT
					92	92	NAS1149F0332P	WASHER (OR AN960-10L)
					34	34	CR3242-4-2	RIVET
					135	135	MS20426AD3-3	RIVET
					140	140	MS20426AD4-3	RIVET
					25	25	MS20470AD3-3	RIVET
					90	90	MS20470AD4-3	RIVET
					24	24	MS21042L3	NUT
					4	4	MS21059L3	NUT PLATE
					34	34	MS21069L3	NUT PLATE
					8	8	MS21069L08	NUT PLATE
					3	3	MS21071L3	NUT PLATE
					1	1	MS21071L08	NUT PLATE
						1	204-030-853-125	LH COPILOT DOOR (204-030-853-137/-155)
1							D412-711-111	WIRING HARNESS, 212/412
B ₁							B ₁ D4268-043	INSTRUMENT PANEL, 212/412 (REPLACES EA20469-15-412)
	1						D205-711-113	WIRING HARNESS, 205
	B ₁						B ₁ D4268-041	INSTRUMENT PANEL, 205 (REPLACES EA20469-15-205)
		1					D204-711-115	WIRING HARNESS, 204
		B ₁					B ₁ EA20469-15-204	INSTRUMENT PANEL, 204
			1				D214-711-117	WIRING HARNESS, 214
			B ₁				B ₁ EA20469-15-214	INSTRUMENT PANEL, 214
				1			D212-711-119	WIRING HARNESS, EAGLE SINGLE
				B ₁			B ₁ D4268-047	INSTRUMENT PANEL, EAGLE SINGLE

(A) IF CUSTOMER PREFERS TO SUPPLY AND MODIFY THEIR OWN DOOR, D412-711-021 SHOULD BE SUPPLIED IN LIEU OF D412-711-041.
(B) INSTRUMENT PANEL INCLUDED WITH HARNESS ABOVE

NOTES

1) WIRING HARNESSES:

For Bell 204/205/210/214 Wiring Harnesses, use drawing D2046904.
For Bell 212 Wiring Harnesses, use drawing D2046903*.
For Bell 412 Wiring Harnesses, use drawing D412-711-901.
For Bell 212 modified per SH07-28/SR02831NY use D212-761-224
or D212-761-225 depending on aircraft s/n.
* Despite the note on the drawing, D2046903 is applicable to all 212 aircraft
serial numbers

Wiring Harnesses will vary
depending on aircraft s/n.

2) D412-711-101 REPLACEMENT WINDOW:

To increase downward viewing clarity, it is acceptable to cut a small section from the replacement window on its downward side per Figure 1 of this document. The cutout can be a maximum of 9.00" wide x 17.00" long (229mm x 432mm), measured along the profile of the replacement window. The corners of the cutout must have a minimum radius of 2" (50mm). The cutout should be located at least 1.0" (25mm) from the flange. The actual shape of the cutout can vary as desired, as long as the overall dimensions are within the specified limits. See Figure 1 for reference.

3) D412-711-043 SNAP VENT KIT:

It is acceptable to install a total of up to 2X D3932-1 Snap Vents (available from Dart) onto the D412-711-101 Replacement Window to provide ventilation into the cabin. Refer to Figure 1 for acceptable locations and size of cutouts.

4) It is acceptable to use MS21042L3 nuts to install the window in lieu of anchor nuts shown on D2046901.

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DC	DRAWING NO.	REV. K
MFG. APPR.	JLM	D412-711	SHEET 3 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR	NTS
DATE	14.04.07	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

REFERENCE ONLY

DAS
02
9-89

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X								D412-711-011	VERTICAL REFERENCE DOOR INSTALLATION, 212/412
	X							D205-711-013	VERTICAL REFERENCE DOOR INSTALLATION, 205/210
		X						D204-711-015	VERTICAL REFERENCE DOOR INSTALLATION, 204
			X					D214-711-017	VERTICAL REFERENCE DOOR INSTALLATION, 214
				X				D212-711-019	VERTICAL REFERENCE DOOR EAGLE SINGLE
					X			D412-711-021	VERTICAL REFERENCE DOOR KIT
A1	A1	A1	A1	A1		X		D412-711-041	VERTICAL REFERENCE DOOR ASSEMBLY
							X	D412-711-043	SNAP VENT KIT
					1	1		D412-761-043	MODIFIED LATCH MECHANISM KIT, LH (REPLACES EA20469-23/-24/-25)
					1	1		D412-711-101	REPLACEMENT WINDOW (REPLACES EAGLE P/N EB212-100L / EA20469-3)
					1	1		D3802-1-120	RUBBER STRIP
							2	D3932-1	SNAP VENT
					1	1		D4165-1	DOUBLER
					1	1		D4165-3	DOOR INNER SKIN (REPLACES EA20469-18)
					1	1		* D4165-5	AFT RIB (REPLACES EA20469-34)
					1	1		** D4165-7	FWD RIB (REPLACES EA20469-31)
					1	1		D4165-9	ANGLE (REPLACES EA20469-17)
					1	1		D4165-11	DOOR COVER PANEL (REPLACES EA20469-21)
					1	1		D4207-1	WINDOW RETAINER (REPLACES EA20469 -14)
					1	1		D4207-3	WINDOW (REPLACES EA20469-13)
					1	1		* D4269-1	ANGLE (REPLACES EA20469-33)
					1	1		** D4269-3	ANGLE (REPLACES EA20469-30)
					1	1		** D4269-5	ANGLE (REPLACES EA20469-29)
					1	1		* D4269-7	ANGLE (REPLACES EA20469-32)
					1	1		D4324-011	ARM REST ASSEMBLY (REPLACES EA20469-16)
					1	1		D4327-1	ANGLE (REPLACES EA20469-11)
					1	1		D4327-3	ANGLE (REPLACES EA20469-07)
					2	2		D4385-1	PLACARD

K

K

* PART OF EA20469-10 REAR RIB ASSEMBLY
** PART OF EA20469-12 FWD RIB ASSEMBLY

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DC	DRAWING NO.	REV. K
MFG. APPR.	JLM	D412-711	SHEET 2 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR	NTS
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